

Virgin Coconut Oil - Unique & Healthy

[http://coconutboard.nic.in/cnoqulty.htm#Virgin Coconut oil](http://coconutboard.nic.in/cnoqulty.htm#Virgin%20Coconut%20oil)

Coconut oil finds extensive use in food, toiletry and industrial sectors because of its unique characteristics. The numerous qualities of coconut oil reported are:

- Oil of natural origin
- Edible in raw form
- Saturated and stable
- Pleasing flavour
- Light colour
- Pleasant aroma
- Biodegradable
- High resistance to oxidative rancidity
- Sharp melting behaviour
- Narrow temperature range of melting
- Skin friendly oil
- Effective heat transfer agent in frying
- Better shelf life for fried product
- Contributes to palatability
- Ideal for deep frying
- Ideal confectionery fat
- Provides moisture barrier and imparts high gloss for bakery items in spray oil use
- Carrier and protective agent for fat soluble vitamins
- Low viscosity
- Superior baby oil
- Oldest and most widely used cosmetic raw material
- Contains 91 per cent assimilable glycerides
- Maximum glycerine content
- Easily saponifiable even in cold
- Good emollient on skin, skull and hair
- Gives softness and suppleness to skin on regular massaging
- Spreads easily on the skin when used as massage oil
- Excellent base for hair oil
- Provides gloss to hair
- Germicidal and antimicrobial property
- Lowers evaporative loss of water from skin
- Protects skin from heat
- Ready penetration into the skin and appreciable water absorbing property
- Nourishes the hair roots and provides coolness to the body
- Imparts hardness and lathering property to soaps
- Illuminant and lubricant
- Does not leave a smoky flame if used in open lamps
- Only slight changes on hydrogenation
- Blends well with other oils
- Easily hydrolyses
- Highest saponification value and lowest iodine value
- Potential fatty raw material in chemical industry due to its biodegradable nature
- Excellent fat source in the preparation of filled milk and infant food formulae
- Essential for the manufacture of toilet soaps, shaving cream, liquid soaps, natural shampoo and other cosmetics
- Desirable emulsifying property
- No harmful effects due to reheating
- Can be converted into diesel fuel
- Essential ingredient in ghee substitutes

- Contains fatty acid derivatives such as monoglycerides, fatty esters, polyol esters, fatty ethanolamide, ethoxylates, polysorbates and betaines
- Contains fatty alcohol derivatives such as fatty chlorides, fatty alcohol sulphate and fatty alcohol ether sulphate.

Nutritional / Medicinal

- Does not contain cholesterol (All vegetable oils does not contain cholesterol, but animal fats contain cholesterol eg: cow milk, butter, ghee, curd, non-veg foods, etc.)
- Easy digestibility and absorbability
- Ideal energy source in baby foods
- Contains Vitamin E
- Composed mainly of short and Medium Chain Fatty Acids (MCFA) or Medium Chain Triglycerides (MCT) which have desirable qualities and functions
- Reduced fat accumulation in body
- Easily oxidized and therefore a preferred energy source
- Requires no transport system to absorb, digest and metabolize
- Very low content of Omega 6 fatty acid
- Helps maintain healthy ratio of Omega 6 to Omega 3 fatty acids when consumed as a part of diet
- Rich content of lauric acid, the source of disease fighting fatty acid derivative monolaurin
- Contains 6-8 per cent monounsaturated oleic acid
- Inhibitory effect against certain chemical carcinogens
- Superior antigenotoxic activity.
- Coconut oil aids faster absorption of calcium and thereby strengthens bones and teeth.
- The saturated fats in coconut oil have antimicrobial properties. Hence, coconut oil is highly effective against microbes that cause indigestion.
- Coconut oil also helps in the absorption of vitamins, minerals and amino acids.

Studies undertaken by the Biochemistry Department, University of Kerala showed that coconut oil:

- Does not elevate blood total cholesterol
- Increases blood HDL cholesterol
- Consumed along with coconut kernel lowers blood cholesterol
- Does not elevate LDL cholesterol or LDL cholesterol / HDL cholesterol ratio
- Decreases serum triglycerides

Why is coconut oil your weapon to fight Cholesterol?

- It is composed mainly of medium chain fatty acids (MCFA) or medium chain triglycerides (MCT) that are burned almost immediately to produce energy for the body.
- They are not converted into body fat or cholesterol to the degree other fats are.
- Coconut oil, has low polyunsaturated fatty acid, is very stable and resistant to oxidation.
- This makes it excellent cooking oil, thereby protecting our cells against damage.
- Since coconut oil is naturally saturated (>90%), it does not need hydrogenation, thereby considerably reducing the chances of high blood cholesterol and high low density lipoproteins (LDL).
- On the other hand, it helps retain high-density lipoproteins (HDL) - the good cholesterol.
- A diet that consists of coconut oil with its MCTs (Medium Chain Triglycerides) ensures higher energy levels, a rise in metabolism and consequently, reduced body weight.
- Coconut oil is effective in reducing body fat and lowering weight because it contains fewer calories than any other fat.
- Coconut oil possesses a distinct short and medium chain fatty acid composition.

- Over 70% of the saturated fatty acids present in coconut oil are short and medium chain containing less than 12 carbon atoms.
- The medium chain fatty acids account for 63.5% of the total fatty acids.
- The Medium Chain Triglycerides (MCTs) undergo a faster and more complete digestion in the stomach and upper small intestine than the Long Chain Triglycerides (LCTs).
- The products of MCT hydrolysis are absorbed into the intestinal cells almost as fast as glucose and are carried directly to the liver.
- The LCTs on the other hand, undergo a slow process of digestion and the products of digestion are then transported to the liver via the lymphatics and systemic circulation.
- Consequently, the LCTs are distributed systematically to all parts of the body before reaching the liver.
- LCTs are therefore, more prone to be deposited as fat in the peripheral tissues or fat depots than the short and medium chain fatty acids.

SATURATED FAT - with a difference

- Coconut oil is a saturated fat from plant origin and cannot be equated with saturated fat from animal sources.
- Coconut oil is healthy because it is predominantly comprised of MCFAs or MCTs, which are readily metabolised in the body and converted to energy instantaneously.
- Coconut oil being a naturally saturated oil does not contain any trans fat.
- Saturated fats are classified into two primary categories (1) long chain fats and (2) short and medium chain fats.
- Medium chain fats in coconut oil are similar to fats in mothers' milk.
- Thus, despite the fact that saturated fats are harmful, those present in coconut oil are in a league of their own.
- Lauric acid, prominent among the MCFAs present in coconut oil has qualities similar to mother's milk.
- When lauric acid enters human body it gets converted to monolaurin, an immunity enhancing compound.

Good for Diabetics

- Coconut oil with its MCTs, put less of a demand on the enzyme production of the pancreas.
- This lessens the stress on the pancreas during meal time when insulin is produced most heavily, thus allowing the organ to function efficiently.\
- Coconut oil improves the secretion of insulin thus controlling blood sugar.
- It also helps in effective utilization of blood glucose.



Virgin Coconut oil: Mother of all oils

- Virgin coconut oil (VCO) is abundant in vitamins, minerals and anti-oxidants, thus making it the 'mother of all oils'.
- Extracted from fresh coconut kernel without any chemical processes, it is the purest form of coconut oil, water white in colour..
- Virgin coconut oil is a major source of Lauric Acid and Vitamin E.
- The virgin coconut oil is free from trans fatty acid, high in medium chain fats (MCFA) or medium chain triglycerides (MCTs) known as lauric acid, which is identical to special group of fats found in human breast milk.
- VCO is widely consumed as MCT oil for weight loss treatment, etc.
- MCT's are more easily and rapidly digested than other types of fats, as they require lower amounts of enzymes and bile acids for intestinal absorption.
- MCT's are metabolized very quickly in the liver and are reported to encourage an increase in energy expenditure, while decreasing fat storage.

- Numerous studies suggest that substituting MCT Oil for other fats in a healthy diet may therefore help to support healthy weight and body composition.
- High quality of this oil makes it an ideal massage oil for babies and also for skin and hair applications.
- It protects the skin from infections caused by bacteria, viruses and fungi, prevents dandruff and hair loss.
- It even eases muscular pain.
- Supplement your body with antioxidants. Antioxidant is your body's natural defense against free radicals.
- It prevents the chain reaction of free radicals and mars sagging and unsightly wrinkles.
- Rich in Vitamin C and Vitamin E, virgin coconut oil slows down the ageing process and assures the best of life and beauty to your skin.
- It also helps in the absorption of fat soluble vitamins A, D, E and K.



Coconut Kernel

- Coconut kernel is nutritious and rich in fibre, vitamins and minerals
- Coconut is a natural anti-bacterial and anti-viral food.
- You can get the benefit of coconut fibre by eating fresh or dried coconut and adding coconut to recipes.
- A multitude of studies have demonstrated that dietary fibre protects against heart attacks and strokes.
- Diet rich in coconut kernel prevent digestive disorders and it regulates bowel activity.
- It restores thyroid functions and increases the metabolic rate.
- Coconut flour is the residue obtained after extraction of milk from kernel. It is dried, defatted and finely ground into a powder resembling wheat flour.
- Coconut flour is low in indigestible carbohydrate and high in fibre (61%).

What the Tradition says

The property of an oil follows the source from which it is extracted.

Coconut fruit belongs to the sweet group. Sweet is creative of **Kapha** and which acts against **Vata** and **Pitta**.

Regarding the properties of the fruits of the sweet group, **Vagbhata** says "They are builders, heavy and cooling. They are with sweet taste and in post digestion also sweet. They are unctuous but a bit holding up of bowels; good to release burning sensation, to heal lesions and hurts due to accidents, etc. It clears **bloods and subsides Pitta** (the heat). It promotes **Kapha** and semen (improves sexual potency)".

"Coconut fruit is agreeable to heart", says **Gunapadom**, a Kerala text.

Health Benefits of Coconut Oil - Articles appeared on Coconut Journal

English Articles

- Health & nutritional benefits from coconut oil and its advantages over competing oils
- Mary G. Enig, Ph.D., F.A. C.N
- A simpler approach to understand coronary heart disease, fat facts and its correlation with consumption of coconut oil - Dr Dipak Kr. Ghosh
- Coconut Oil: Chemistry, Production and Its Applications - A Review - Gopala Krishna AG
- CFTRI, Mysore
- Coconut-the best food for human beings' health and longevity - Professor B. M. Hegde
- Lipid profile and antioxidant enzymes in coconut oil consumers - P Sabitha* and D M Vasudevan
- Lipid Profile in blood and in plaque material from diseased Coronary Artery - D.M. Vasudevan, MD, FRCPath
- Coronary artery disease (Atherosclerosis) - an overview & the role of coconut oil in hypercholesterolemia - Dr. D.M. Vasudevan
- Health benefits of virgin coconut oil - E.V. Carandang
- Potential of coconut dietary fiber - K.S.M.S. Raghavarao, CFTRI, Mysore

Malayalam Articles

- Coconut oil and Cholesterol Debate - Dr.K.P.Paoulose
- Coconut oil - Experiences and Theories - Dr.Rajmohan
- Coconut oil's Enemy Animal Fat - Vijayan R & Dr.Remany Gopalakrishnan